

CLAIMS

What is claimed is:

1 (1) A brightness controlling apparatus, comprising:

2 an evaluator for detecting a feature of a certain window displayed on a
3 screen of a display unit; and

4 a display controller for controlling the brightness of said screen of said
5 display unit according to said feature of said window, detected by said
6 evaluator.

1 (2) The apparatus according to Claim 1;

2 wherein said evaluator detects a type of application to be displayed in said
3 window; and

4 said display controller controls said brightness of said screen of said display
5 unit according to said type of said application software detected by said
6 evaluator.

1 (3) The apparatus according to Claim 1;

2 wherein said evaluator detects a method by which data is displayed in said
3 window; and

4 said display controller controls the brightness of said screen of said display
5 unit according to said method by which data is displayed in said window,
6 detected by said evaluator.

1 (4) The apparatus according to Claim 1;

2 wherein said evaluator calculates the display brightness in said window
3 according to a draw signal issued to said window displayed on said screen
4 of said display unit; and

5 said display controller controls the brightness of said screen of said display
6 unit according to said display brightness in said window, calculated by said
7 evaluator.

1 (5) The apparatus according to Claim 1;

2
3 wherein said evaluator detects a feature of a focused window on said
4 screen, said focused window being selected from a plurality of windows
5 displayed on said screen of said display unit.

1 (6) The apparatus according to Claim 1;

2
3 wherein said display controller sets the screen brightness of said display
4 unit in case the rate of the size of said window whose feature is detected by
5 said evaluator to the size of said screen of said display unit is over a certain
6 value.

1 (7) A brightness adjusting system, comprising:

2
3 a display gradation calculator for calculating the display brightness in a
4 specific area of an image displayed on the screen of a display unit; and

5 a brightness adjuster for adjusting the screen brightness of said display unit
6 according to said display brightness in said specific area, calculated by said
7 display gradation calculator.

8 (8) The system according to Claim 7;

9 wherein said display gradation calculator calculates the display brightness
10 in said specific area by converting the gradation of each RGB element in a
11 draw signal of an image displayed in said specific area to a gray scale
12 gradation.

1 (9) A computer system, comprising:

2 a processor for executing an arithmetic operation; and

3 a display unit for displaying the result of said arithmetic operation executed
4 by said processor;

5 wherein said processor executes the following processings for:

6 detecting the display brightness in a certain window displayed on the screen
7 of said display unit; and

8 controlling said display unit so as to change the screen brightness of said
9 display unit according to said detected display brightness in said window;
10 and

11 said display unit changes said screen brightness under the control of said
12 processor.

1 (10) The computer system according to Claim 9;

2 wherein said processor is controlled by an operating system having a power
3 management function and controls said display unit with use of said power
4 management function of said operating system so as to change said screen
5 brightness of said display unit.

JP920000184US1

1 (11) A liquid crystal display unit, comprising:

2 a liquid crystal display screen for displaying an image;

3
4 a back-light for lighting said liquid crystal display screen; and

5 a brightness controller for controlling the brightness of said back-light;

6 wherein said brightness controller executes processings for:

7 receiving a brightness control signal generated according to the display
8 brightness in a specific area calculated from a draw signal in an image in
9 said specific area, said image being selected from a plurality of images to be
10 displayed in said liquid crystal display screen; and

11 changing the brightness of said back-light according to said brightness
12 control signal.

JP920000184US1

1 (12) A brightness controlling method for controlling the screen brightness of a
2 display unit, wherein said method comprises:

3 a step of calculating the display brightness in a certain window displayed on
4 the screen of said display unit; and

5 a step of adjusting the brightness of the whole screen of said display unit
6 according to said calculated display brightness.

1 (13) The method according to Claim 12,
2
3 wherein said method further comprises a step of monitoring the state of
4 each window displayed on said screen of said display unit so as to detect a
5 focused window on said screen, and

6 said step of calculating said display brightness further comprises a step of
7 calculating the display brightness in said detected focused window.

1 (14) The method according to Claim 12;

2 wherein said step of calculating said display brightness further comprises:

3 a step of obtaining gradation information of each RGB element in a color

4 displayed in said window; and

5 a step of converting said obtained gradation of each RGB element to a gray

6 scale gradation so as to decide said converted gray scale gradation as the

7 display brightness in said window.

1 (15) A computer software for enabling a computer to execute a predetermined
2 processing;

3 wherein said computer software comprises:

4 a processing for calculating the display brightness in a certain window
5 displayed on the screen of a display unit; and

6 a processing for controlling said display unit so as to change said screen
7 brightness of said display unit according to said calculated display
8 brightness.

1 (16) The software according to Claim 15;

2 wherein said processing for controlling said display unit so as to change said
3 screen brightness of said display unit uses said power management function
4 of said operating system.

1 (17) A storage medium for storing a computer software to be executed by a
2 computer readably by an input device of said computer;

3 wherein said computer software enables said computer to execute:

4 a processing for calculating the display brightness in a certain window
5 displayed on the screen of a display unit; and

6 a processing for controlling said display unit so as to change said screen
7 brightness of said display unit according to said calculated display
8 brightness.